

and though most of them were occupied there was no loss of life in their destruction. Fortunately the cotton gin was not in operation that day; if it had been, the loss of life would probably have been considerably greater.

The tornado apparently lifted at the Mississippi levee, about 15 miles from its point of origin, but descended again in Tipton County, Tenn., doing more or less property damage in the vicinity of Phelan, a village 10 or 12 miles southeast of Covington, where two persons were slightly injured in the collapse of a brick store building.

The tornado struck Clarkedale at about 4 p. m. and Phelan near 5.15 p. m., indicating a velocity of translation of about 35 miles per hour a little east of northeast. Its destructive path averaged about 500 feet in width and was clearly marked on both edges. Most observers noted a funnel-shaped cloud of greenish appearance; also the roar characteristic of tornadoes. The position of the debris also indicated rotary motion, though not in a very marked degree.

The property damage in Arkansas has been estimated at \$150,000, while in Tennessee it will hardly exceed \$20,000.

TORNADO OF DECEMBER 24, 1921, IN NORTHEASTERN LOUISIANA.

By RAY A. DYKE, Meteorologist.

[Weather Bureau Office, New Orleans, La., Jan. 24, 1922.]

A tornado occurred between 12:10 a. m. and 1 a. m. on December 24, 1921, in Union and Morehouse Parishes in northeastern Louisiana, over a path 25 miles long and of average width about 200 yards, the direction of movement being east-northeast. This was one of a number of tornadoes that occurred during the same night in the lower Mississippi Valley. The 8 p. m. weather map of

December 23 showed a well defined, long, narrow trough of low atmospheric pressure over the Ohio Valley, Arkansas, northern Mississippi, northwestern Louisiana, and eastern Texas, with temperatures in the trough ranging from 68 to 72 except in the Ohio Valley. With these conditions the shift of the wind to the west and northwest, bringing air 30° to 35° colder, should have taken place at or near the time of the occurrence of the tornadoes.

The tornado in Louisiana appears to have originated just southwest of Spencer, a village which was in the path of the storm and suffered great damage. One man was killed and many persons suffered injury. A baby was blown 150 yards from the Eckhoff home but was not hurt, although the father was killed. Nearly all the buildings in the place, including some substantial stores, a railroad station, and several houses, were destroyed. Twenty box cars were demolished. The postmaster at Spencer states that the lumber from houses was picked up as far as 11 miles away and merchandise was blown 3 miles from the village.

The northeastward movement of the tornado was marked by much damage to standing timber in Union and Morehouse Parishes, by the topping and blowing down of trees. This damage is estimated at several million feet. Crossing Bayou Bartholomew, the tornado struck the Tisdale farm, scattered every house in its trail, and killed one woman and broke her daughter's back, both being blown 300 yards against a tree. The storm then passed through a tract of woods and struck the Shelton Place farm, scattered every house in its path as before, razed the Gullege sawmill, and passing on, caused damage to cabins, and disappearing near Gallion.

Notwithstanding the destruction of numerous dwellings while the occupants were in bed, only two deaths were caused by the storm. The property damage is conservatively estimated at \$60,000.